A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01L29/739

//H01L27/07,H01L29/78,H01L29/732

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, IBM-TDB, WPI Data, PAJ

Further documents are listed in the continuation of box C.

C. DOCUMI	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to dalm No.
Х	US 5 776 813 A (HUANG T-H ET AL) 7 July 1998 (1998-07-07) column 2, line 46 - column 5, line 48; figures 1-11	1-21
X	WO 00/22678 A (BERLAND V) 20 April 2000 (2000-04-20) page 10, line 23 - page 15, line 11; figures 1,2,6,7 page 15, line 17 - page 18, line 1; figures 5.1-5.16	1-21
x	EP 0 190 931 A (MITSUBISHI ELECTRIC CORP) 13 August 1986 (1986-08-13) page 17, line 21 - page 23, line 8; figures 6,7	1-21

Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance.	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the
 "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
20 December 2004	04/01/2005
Name and malling address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Morvan, D

χ Patent family members are listed in annex.

INTERNATIONAL SEARCH REPORT

IB2004/051881

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